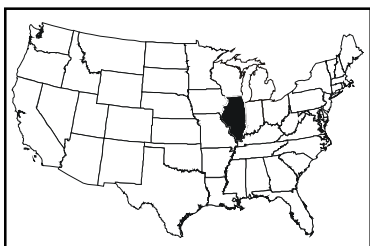




## U.S. Fish & Wildlife Service



*The Illinois cave amphipod is found in six caves in Illinois.*



## Illinois Cave Amphipod *Gammarus acherondytes*

The Illinois cave amphipod is an endangered species. Endangered species are animals and plants that are in danger of becoming extinct. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

### Life History

The Illinois cave amphipod lives in the "dark zone" of cave streams. Like other amphipods, this species needs cold water and does not tolerate a wide range in water temperatures. They are sensitive to touch and avoid light. The Illinois cave amphipod feeds on all kinds of dead animals and plants as well as the thin bacterial film covering submerged surfaces. Because of its sensitivity to contamination, the Illinois cave amphipod is an excellent indicator of the water quality of the cave systems it inhabits and the groundwater from the surrounding area.

### Range

This species has never been widely distributed. It is endemic to the Illinois Sinkhole Plain in Monroe and St. Clair Counties in southwestern Illinois. Historically, the Illinois cave amphipod was known from six cave systems, all within a 10-mile radius of Waterloo, Illinois. These caves are each fed by separate watersheds, with no known connection among them. Therefore, scientists believe it is unlikely that the amphipod could be distributed to other cave systems via streams.

## Threats

---

Currently, the Illinois cave amphipod is found in only three of the original six cave sites. These caves are all in Monroe County. Entrances to two caves are owned by the Illinois Department of Natural Resources, which allows public use of one of the sites. Three entrances to the third cave, which is privately owned, are dedicated as Nature Preserves and are protected.

Factors that threaten the Illinois cave amphipod include groundwater pollution from pesticides, along with contamination from human and animal wastes. Groundwater feeding the caves in which the amphipod lives can be affected in a number of ways, including seasonal application of pesticides and fertilizers, contamination from septic systems, sewers, or livestock feedlots, or accidental or intentional dumping of toxic substances into a sinkhole.

Scientists have found evidence of several pesticides, some of which may be affecting the amphipod, in streams, wells, and springs near the caves inhabited by the species. Also found were quantities of metals and bacterial pollution from livestock and human wastes. The presence of these contaminants indicate that the deterioration of water quality is likely the primary cause of the decline of the Illinois cave amphipod.

Human use of caves inhabited by the amphipod could also be a factor affecting its survival. People moving through the caves in which public use is permitted can potentially introduce toxic materials, injure or kill amphipods, or disturb habitat.

## Current Status

The amphipod's current range is close to the growing St. Louis metropolitan area, and there is potential for increased impacts on the species. The U.S. Fish and Wildlife Service has listed the amphipod as an endangered species, protecting the species from take and providing a means to ensure that its populations do not decline due to alteration of habitat. The Illinois cave amphipod is currently protected by the Illinois State Endangered Species Protection Act, which prohibits direct injury or mortality.

For more information contact:  
U.S. Fish and Wildlife Service  
Rock Island Field Office  
4469 48th Avenue Court  
Rock Island, Illinois 61201  
309-793-5800

or

U.S. Fish & Wildlife Service  
1 Federal Drive  
Fort Snelling, Minnesota 55111  
612/713-5350